



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/527,895	03/15/2005	Hubertus Maria Rene Cortenraad	NL 020912	9544
24737	7590	01/31/2006		
PHILIPS INTELLECTUAL PROPERTY & STANDARDS P.O. BOX 3001 BRIARCLIFF MANOR, NY 10510			EXAMINER DOLE, TIMOTHY J	
			ART UNIT 2858	PAPER NUMBER

DATE MAILED: 01/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/527,895

Applicant(s)

CORTENRAAD ET AL.

Examiner

Timothy J. Dole

Art Unit

2858

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 7-10 is/are rejected.
- 7) ☒ Claim(s) 4-6 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Objections

1. Claim 9 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 9 simply claims a beam current measurement circuit, which is already claimed in claim 1.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-3 and 8-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Meyer (US 3,831,057).

Referring to claims 1, 9 and 10, Meyer discloses a display apparatus and method comprising an electron gun comprising at least a first electrode (fig. 2 (K)) and a second electrode (fig. 2 (G1)), a drive circuit (fig. 2 (circuit elements supplying signal to G1)) for supplying a drive signal (fig. 2 (signal applied to G1)) to the first electrode and/or the second electrode (column 3, lines 10-14) to modulate an intensity of an electron beam (column 3, lines 10-14) originating from the first electrode, a beam current measurement circuit (fig. 2 (R) and column 1, lines 61-67) coupled to the first electrode (fig. 2) for measuring a measured beam current representing a beam current flowing in the first

electrode (fig. 2 (R) and column 1, lines 61-67), and a compensation circuit (fig. 2 (C'gk), (C'kf), (R') and (2)) for supplying a compensation current to the first electrode to compensate for a capacitive current through a capacitance (fig. 2 (Cgk)) between the first electrode and the second electrode (column 2, lines 10-24).

Referring to claim 2, Meyer discloses the apparatus as claimed, characterized in that the first electrode is a cathode (fig. 2 (K)), and in that the second electrode is a G1-grid (fig. 2 (G1) and column 3, lines 7-10).

Referring to claim 3, Meyer discloses the apparatus as claimed, characterized in that the compensation circuit (fig. 2) comprises an amplifier (fig. 2 (2)) for supplying an inverted drive signal being the drive signal inverted in amplitude at an amplifier output of the amplifier (fig. 2), and a compensation capacitor (fig. 2 (C'gk)) coupled between the amplifier output and the first electrode (fig. 2).

Referring to claim 8, Meyer discloses the apparatus as claimed, characterized in that the drive circuit (fig. 2) comprises a current to voltage converter (fig. 2 (R)) for converting the measured beam current into a measured voltage (column 1, lines 61-67), and a subtractor (Fig. 2 (2)) for subtracting the measured voltage from an input signal (fig. 2 (V+)) to supply an error voltage to the drive circuit to obtain the drive signal (column 2, lines 10-42).

4. Claim 7 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Meyer.

Referring to claim 7, Meyer discloses the apparatus as claimed except for the plurality of additional electron guns and associated components.

It should be noted that according to MPEP 2144.04 (VI) (B), the mere duplication of parts has no patentable significance unless a new and unexpected result is produced. Since the plurality of electron guns, drive signals, measurement circuits and compensation circuits all perform exactly the same, the plurality of equipment does not produce any unexpected results and is therefore not patentably distinct over the prior art of record.

It would have been obvious to one skilled in the art at the time of the invention to incorporate the plurality of equipment into the apparatus of Meyer for the purpose of providing a plurality of signals.

Allowable Subject Matter

5. Claims 4-6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following patents are cited to show the state of the art with respect to electron guns.

USPN 6,614,482 to Griepentrog: This patent shows an apparatus for regulating electron beam current provided to a display.

USPN 6,433,553 to Goeckner: This patent shows an apparatus for current measurement with capacitive compensation.

Art Unit: 2858

USPN 6,384,536 to Yasui et al.: This patent shows a cathode ray tube display with current measuring and a deflection circuit.

USPN 6,285,401 to Griepentrog: This patent shows an apparatus for measuring electron beam current with overshoot compensation.

USPN 5,994,841 to Allen et al.: This patent shows an apparatus for compensating for leakage in a beam current by using a mathematical equation.

USPN 3,955,116 to van den Berg: This patent shows an apparatus for controlling electrode potential in an electrode gun during line flyback.

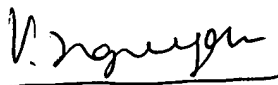
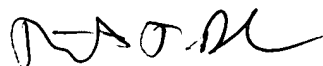
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy J. Dole whose telephone number is (571) 272-2229. The examiner can normally be reached on Mon. thru Fri. from 8:00 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diane Lee can be reached on (571) 272-2399. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TJD



VINCENT Q. NGUYEN
PRIMARY EXAMINER